

In re Reissue of: U.S. 5,464,551
Inventor: Gerbrand Deetman
Serial No: 09/801,883
Response to Office Action

REMARKS

Claims 90 – 106 are pending in the above-identified reissue patent application.

Surrender of the original patent:

Applicant notes with appreciation the Examiner's acknowledgement that the original patent, U.S. Patent No. 5,464,551 ("551 Patent") has already been surrendered in conjunction with issuance of the parent reissue patent application Serial No. 08/966,425. It is respectfully submitted that Applicant has met the requirements of 37 C.F.R. 1.178.

Oath/Declaration:

In the Office Action, mailed September 14, 2004, Claims 90-106 have been rejected as being based upon a defective oath/declaration under 35 U.S.C. 251.

Applicant submits herewith the *Supplemental Declaration for Reissue Patent Application to Correct "Errors" Statement (37 CFR 1.175)* executed by the inventor, Gerbrand Deetman. Now that Applicant has provided the requested Supplemental Declaration containing the language indicated by the Examiner to be acceptable, it is respectfully requests that the rejection of claims 90 - 106 under 35 U.S.C. 251 be withdrawn.

Recapture Rejection under 35 U.S.C. 251:

Applicant respectfully requests reconsideration and withdrawal of the rejection of claims 90-106 under 35 U.S.C. 251 for being improperly broadened in the application for patent upon which the present reissue application is based.

The Examiner contends that the pending reissue claims eliminated the substantially C₄ or C₅ isoalkyl base stock material limitations and, thus, are broader than the corresponding claims

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of the original '551 Patent. He takes the position that "... this broadened aspect of the claim relates to surrendered subject matter during prosecution of [the] original application".

Applicant respectfully traverses this rejection and maintains that claims 90 - 106 ("the reissue claims") are not added in an attempt to recapture subject matter that was surrendered in the prosecution of the original application upon which the '551 Patent was issued. Instead, claims 90 – 106 are directed to a part of Applicant's invention that was disclosed but mistakenly not originally claimed in the application which issued as the '551 Patent. The key aspect of this part of the invention not originally claimed is the particular combination of additives used with any phosphate ester base stock composition. As explained in the Declarations of Gerbrand Deetman and Wendell Brooks, dated November 4, 1997 and November 7, 1997, respectively (of record in this application), the failure to claim the full scope of the invention disclosed in the specification occurred without deceptive intent.

The specification clearly discloses that the additive combinations of the invention can be effectively utilized to enhance any known phosphate ester base stock. See column 6, lines 15 – 23 of the '551 Patent which states:

"In addition to the improved base stock, the composition of the invention preferably contains a combination of additives which further enhances the properties of the fluid as compared to fluids previously available in the art for use in the aircraft hydraulic systems. Moreover, it has been found that the additive combinations of this invention are effective in enhancing the properties of base stock compositions previously known in the art or otherwise differing from the preferred base stock of the functional fluids of this invention."

Also, in the specification column 12, lines 34-35 and Table 1 which follows, it is stated that "... [t]he additive combination is also effective in combination with other ranges of base stock

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compositions as set forth below" (See the Goetz Declaration, dated November 4, 1997, which is of record in this application).

The specification shows how to make and use this novel additive package with phosphate ester base stock compositions. For example, Tables 2 and 3, at Columns 14 and 15, describe two formulations of the novel combination of additives of the invention with previously known base stock compositions containing prior art base stocks comprised of tri-n-butyl phosphate and di-n-butylphenyl phosphate. In Table 7, at Column 24, formulation W-17 describes a combination of the novel additive package and previously known normal butyl phosphate ester base stocks. In Table 11, examples 1 and 2 also describe such a combination of novel additive package with previously known base stocks. Because of the aforementioned statements in the specification, those of ordinary skill in the art would understand that the novel additive package disclosed by Applicant can be utilized in combination with other known phosphate ester base stock compositions.

Various phosphate esters were known in the art at the time of the invention to be useful as base stocks for functional fluids. The Okazaki et al. reference enclosed as Exhibit 1 to the Wolfe Declaration (submitted as Exhibit A to the aforementioned Goetz Declaration) provides a brief history of the use of phosphate esters as fire resistant base stock components and the designation of "Types" of fluids.

Applicant also notes that several of the patents cited by Applicant which are of record in the prior merged reexamination/reissue proceeding, as well as by the Examiner in the Office Action, dated January 24, 2002, disclose prior art base stock formulations that would have been known by those skilled in the art. For example, the MacKinnon U.S. Patent No. 4,206,067 ("the

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'067 Patent"), cited in this Office Action, discloses base stock formulations containing phosphate esters substituted with aryl or alkyl groups where "all three groups may be the same, or all three different, or two groups may be alike and the third different." (See, e.g., the '067 Patent, Col. 2, lines 56-61). Similarly, the Smith U.S. Patent No. 3,679,587 ("the '587 Patent"), also cited in the aforementioned Office Action, discloses functional fluid compositions containing phosphate esters substituted with alkyl or alkoxyalkyl groups, phenyl and substituted phenyl groups. Smith '587 also discloses "Base Fluids" in the examples, of which A, B, and E contain only dibutylphenyl phosphate as the base stock (see, Cols. 5 and 6 thereof). Applicant also provided additional examples of this art, U.S. Patent No. 2,894,911, which discloses alkyl diaryl phosphate alone as the base stock, and U.S. Patent No. 2,903,428, which discloses dialkyl phenyl phosphate alone as the base stock.

Accordingly, the phosphate ester base stock compositions which can be employed in compositions of the present invention are not limited to what is disclosed as preferred embodiments in the present specification. It is permissible for Applicant to build the description of his or her invention on what was previously known in the art. See, Hybritech Inc. v. Monoclonal Antibodies Inc., 231 U.S.P.Q. 81, 94 (Fed. Cir. 1986) ("a patent need not teach, and preferably omits, what is well known in the art").

Based upon Applicant's disclosure of the unexpected beneficial properties of the novel additive package of the invention in combination with prior art base stocks, and the statements in the specification (col. 6, lines 15-23 of the '551 Patent) that the use of the additive package will "[enhance] the properties of base stock compositions previously known in the art", one of ordinary skill would understand that the novel additive package disclosed in the specification

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could be combined with any phosphate ester base stock to form a functional fluid composition of the invention.

Following the three-step analysis set forth in Pannu v. Stolz Instruments, 258 F.3d 1366 (Fed. Cir. 2001), in order to ascertain if the recapture rule applies it is first necessary to determine whether or not any aspect of the reissue claims are broadened in comparison to the issued claims of the patent to be reissued. Here, the phosphate ester base stock component of the functional fluids of the invention is claimed more broadly because it does not include the limitation to just the preferred phosphate esters “... in which the alkyl substituents are substantially isoalkyl C₄ or C₅ ...”. Second, it is necessary to determine whether the broader aspects of the reissue claim related to surrendered subject matter. As will be discussed in detail, below, it is respectfully submitted that the amendment of the original claims in the application upon which the ‘551 Patent issued (*i.e.* which claims recited substantially C₄ or C₅ isoalkyl base stock) was more restrictive than necessary to overcome the cited prior art. Accordingly, the broader aspect of the reissue claims relates to subject matter which did not need to be surrendered to secure allowance of the ‘551 Patent claims.

The third step in the analysis is to determine whether the reissued claims are materially narrowed in other respects to avoid the recapture rule. As the court in Anderson v. International Engineering & Mfg., Inc., 160 F.3d 1345, 1349, observed “... the question of whether the claims have been materially or substantially enlarged must be determined upon the claim as a whole.” (See Mentor Corp. v. Coloplast, Inc. 998 F2d 992, 996). Thus, the whole claim and both of its key constituent elements (the phosphate ester base stock composition and the additive package) must be considered.

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The Federal Circuit explained in In re Clement, 45 U.S.P.Q. 2d 1161 (Fed. Cir. 1997), that the "recapture rule" exists to prevent "... a patentee from regaining through reissue the subject matter that he surrendered in an effort to obtain allowance of the original claims ..." (45 U.S.P.Q. 2d at 1164). The rule requires that the claims be analyzed first to determine if they are broader in any material aspect and, if so, to determine if the broader aspect relates to surrendered subject matter. Id. The court recognized, however, that situations may exist where the reissue claims may be broader in some aspects and narrower in other aspects when compared to the prior claims. 45 U.S.P.Q. 2d at 1165. In such instances, the court explained, the claims must be analyzed to determine whether both the narrower and broader aspects of the claim are relevant to prior art rejections to determine whether the claims violate the recapture rule, focusing on whether the patentee was "attempting to recapture surrendered subject matter." Id. The court then outlined a test, which is reproduced in the M.P.E.P. at § 1412.02. That section of the M.P.E.P. further instructs that "if the narrowing limitation has a material aspect to it, then there is no recapture."

Because of the facts in this application, however, the test outlined in Clement and reproduced in the M.P.E.P. does not complete the analysis. As the C.C.P.A. noted in In re Richman 161 U.S.P.Q. 359 (C.C.P.A. 1969) attention must also be directed to the original claims and the amendments made during the prosecution of the patent to determine whether those amendments were necessary to secure allowance over the prior art. 161 U.S.P.Q. at 363. As the court in Richman reasoned,

"... certainly one might err without deceptive intention in adding a particular limitation where a less specific limitation regarding the same features or an added limitation relative to another element,

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would have been sufficient to render the claims patentable over the prior art."

Id. The court stated that the recapture rule did not prevent an Applicant from broadening a limitation added to a claim in obtaining its allowance, "if the limitation turns out to be more restrictive than the prior art required." Id.

Applicant maintains that the reissue claims (claims 90-106) require analysis under both tests. The content of the phosphate ester base stock and the combination of additives were both directly relevant to the rejections overcome in the prosecution of the '551 patent. As noted by the Examiner, in relation to all of the issued claims, the reissue claims are broader with respect to the definition of the phosphate ester base stock. However, it is clear that the reissue claims are narrower than independent claims 1, 19, 31, 50, 56, and 67 of the '551 patent and the claims dependent thereon with respect to the definition of the additive package, which is a material aspect. Therefore, the recapture rule, as outlined in Clement and explained in M.P.E.P. 1412.02, does not bar the reissue claims with respect to independent claims 1, 19, 31, 50, 56, and 67 of the '551 Patent.

Applicant acknowledges that in relation to the remaining independent claims 7, 8, 11 and 78 of the '551 Patent, the claims in the instant application are not narrower with respect to the additive package. Yet, this does not automatically bar reissue claims 90-106 under the recapture rule because, under the test in Richman, the broadening with respect to the base stock in the reissue claims is not recapture of surrendered subject matter. As explained more fully below, the limitation added to '551 Patent claims 7, 8, 11, and 78 defining the base stock as substantially C₄ or C₅ isoalkyl phosphate esters was not necessary to distinguish these claims over the art.

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The claims that issued in the subject patent are all directed to fluid compositions that contain mixtures of phosphate esters, namely trialkyl-, alkyl diaryl-, dialkyl aryl-, and triaryl-phosphate esters, as base stock for the compositions. In particular, the alkyl substituents in these phosphate esters were specified as being substantially C₄ or C₅ isoalkyl substituents that are bonded to the phosphate moiety through a primary carbon. The '551 patent discloses this aspect as one of the features of the invention. (See, for example, Col. 12, line 7, through Col. 13, line 21). As Applicant noted in the present reissue application papers, the new claims are directed to subject matter that was disclosed in the application but, mistakenly, not claimed and not surrendered during prosecution of the original patent.

Only two office actions were issued during the prosecution of the '551 Patent; an Office Action, dated January 29, 1993, in parent application Serial No. 07/897,189 ("the '187 Application"), and an Office Action, dated March 8, 1994, in continuation-in-part application Serial No. 08/099,267 ("the '267 Application"). In each of these office actions, the claims were rejected as anticipated under 35 U.S.C. 102 or obvious under 35 U.S.C. 103 ,in view of various combinations of the following patents: MacKinnon, U.S. Patent No. 4,206,067; MacKinnon, U.S. Patent No. 4,324,674; MacKinnon, U.S. Patent No. 5,035,824; Farng et al., U.S. Patent No. 5,037,567; Chesluk et al., U.S. Patent No. 3,931,022; and Ryan et al. 4,868,023. The rejections pointed not only to the phosphate ester base stock components disclosed in these references, but also to the additives disclosed.

In response to the "first" Office Action, dated January 29, 1993, (in the '189 Application) Applicant chose to refile the application on July 28, 1993 as a continuation-in-part and included a Preliminary Amendment which clarified some specification and claim language from the

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original application, added new claims and added additional experimental data to the specification. The "second" office action was issued March 8, 1994 as the first action in the continuation-in-part '267 Application. This office action did not repeat all of the rejections from the Office Action, dated January 29, 1993, but it did contain the same substantive rejections over the art based on both the phosphate ester base stock components and the additives disclosed in the art.

In response to the Office Action, dated March 8, 1994, Applicant filed an Amendment on June 28, 1994 which, for the first and only time during prosecution leading to issuance of the '551 Patent, cancelled some claims and amended the remaining claims to limit the phosphate ester base stock component of the claimed fluid compositions to the preferred embodiment, namely those phosphate esters that contained substantially C₄ or C₅ isoalkyl substituents. Applicant also emphasized that the references cited did not teach or suggest the use of substantially C₄ or C₅ isoalkyl substituents on phosphate ester base stocks and therefore the invention claimed was not anticipated nor rendered *prima facie* obvious by the references. (See, for example, Amendment dated June 28, 1994, pages 27-30). No further Office Actions were issued and no further amendments were made prior to the issuance of the '551 patent.

The combination of additives used in the claimed functional fluid composition was pertinent to the rejections over the art. As discussed in detail in the Response to Office Action, dated January 24, 2002 (filed July 22, 2002 in this reissue application) in response to the 35 U.S.C. 103 rejections raised here, the combination of additives in Applicant's novel additive package was not suggested or obvious in view of the art of record in the prior prosecution or of record in this reissue application Office Action. Thus, '551 Patent claims 7, 8, 11, and 78 were

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patentable over the art without the limitation of substantially C₄ or C₅ isoalkyl phosphate ester base stocks. Applicant did not concede the subject matter of reissue claims 90-106 during prosecution, because the amendments made to '551 Patent claims 7, 8, 11, and 78 to recite substantially C₄ or C₅ isoalkyl base stock material were more restrictive than was necessary to overcome the cited art. It is clear that prior to this amendment, these claims were distinguishable over the cited art based on the additive composition that was neither taught nor suggested by the art. Similarly, reissue claims 90-106 are not anticipated or rendered obvious by the art of record, because they also recite the novel additive package while more broadly reciting Applicant's mistakenly unclaimed inventive compositions comprising the novel additive package in combination with all known fire resistant phosphate ester base stock compositions. Therefore, the recapture rule does not bar reissue claims 90-106 with respect to '551 Patent claims 7, 8, 11, and 78.

These reissue claims were allowable then the '551 Patent application was prosecuted, they are allowable now and they do not seek to recapture a material aspect surrendered during prosecution of the '551 Patent. Applicant maintains that he is entitled to the full scope of the invention as presently claimed and therefore respectfully requests allowance of claims 90-106.

It is respectfully requested that the rejections of the claims under 35 U.S.C. 251 be reconsidered and claims 90-106, all of the claims in the application, be found allowable.

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Should the Examiner believe that issues remain outstanding, the Examiner is respectfully requested to call Applicant's undersigned attorney in an effort to resolve such issues and advance this application to issue.

Respectfully submitted,

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